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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,779	07/14/2003	Koichi Sato	P23210	4035
7055 7590 11/30/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER SELBY, GEVELL V	
			ART UNIT 2622	PAPER NUMBER
			NOTIFICATION DATE 11/30/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/617,779

Applicant(s)

SATO, KOICHI

Examiner

Gevell Selby

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11 is/are rejected.
- 7) ☒ Claim(s) 9, 10, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/050868.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/18/07 has been entered.

Response to Arguments

2. Applicant's arguments, see the amendment, filed 10/18/07, with respect to the 101 rejection of claim 1 have been fully considered and are persuasive. The 35 U.S.C. 101 rejection of claim 1 has been withdrawn.

3. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Muramatsu, US 2001/0010520.

In regard to claim 1, Muramatsu, US 2001/0010520, discloses an image recording medium, comprising:

an image recording area (see figure 1, element 4) that stores an image signal, the image signal being subjected to a plurality of image correction processes in a process order (see para 50: image data is stored in the VRAM 4), the plurality of image correction processes including a gamma correction (see para 55); and

an information recording area (see figure 1, element 14a) configured to store data indicating the process order in which the image correction processes are performed (see para 51 and 55: when gamma correction is selected it is added to the process order in the array variable 14a).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu, US 2001/0010520, in view of Kobayashi et al., US 5,390,028.

In regard to claim 2, Muramatsu, US 2001/0010520, discloses an image signal process order device that processes a corrected image signal obtained by performing a plurality of image correction processes to an image signal in a process order, comprising:

a process order determining processor (see figure 1, element 14)
configured to determine the process order (see para 51).

The Muramatsu reference discloses an image signal processing component (see figure 1, element 2) that determines the optimal processing order for executing the picture image processing functions (see para 52), wherein the plurality of image correction processes including a gamma correction (see para 55); however, the reference does not disclose that the processor is configured to perform a plurality of restoration processes to the corrected image signal to restore the image signal, the plurality of restoration processes being performed in a restoring order which is the reverse of the process order.

Kobayashi et al., US 5,390,028, discloses an image signal processing device (see figure 3, element 24) configured to perform a plurality of restoration processes to the corrected image signal to restore the image signal, the plurality of restoration processes being performed in a restoring order which is the reverse of the process order, wherein the plurality of image correction processes including a gamma correction (see column 5, line 53 to column 6, line 20).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Muramatsu, US 2001/0010520, in view of Kobayashi et al., US 5,390,028, to have an image signal processing device configured to perform a plurality of restoration processes to the corrected image signal to restore the

image signal, the plurality of restoration processes being performed in a restoring order which is the reverse of the process order, wherein the plurality of image correction processes including a gamma correction, in order to restore the original characteristics of the image provided by a video camera as taught by Kobayashi (see column 6, lines 10-15), thus providing a high quality reproduction.

In regard to claim 3, Muramatsu, US 2001/0010520, discloses an image signal process order system, comprising:

- an image correcting processor (see figure 1, element 2) configured to perform a plurality of image correction processes to an image signal in a process order to generate a corrected image signal (see para 51), the plurality of image correction processes including a gamma correction (see para 55);

- a image signal recording processor (see figure 1, element 3) configured to record the corrected image signal in a recording medium (see para 54);

- a process order recording processor (see figure 1, element 14) configured to record the process order in the recording medium (see para 51);

- a process order reading processor (see figure 1, element 14) configured to read the process order from the recording medium (see para 53, the process order is read to determine the processing function to call and execute). The Muramatsu reference does not disclose an image signal restoring processor configured to perform restoration processes to the corrected image signal to restore the image signal, the restoration processes being performed in a restoring order which is the reverse of the process order.

Kobayashi et al., US 5,390,028, discloses an image signal processing device (see figure 3, element 24) configured to perform a plurality of restoration processes to the corrected image signal to restore the image signal, the plurality of restoration processes being performed in a restoring order which is the reverse of the process order, wherein the plurality of image correction processes including a gamma correction (see column 5, line 53 to column 6, line 20).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Muramatsu, US 2001/0010520, in view of Kobayashi et al., US 5,390,028, to have disclose an image signal restoring processor configured to perform restoration processes to the corrected image signal to restore the image signal, the restoration processes being performed in a restoring order which is the reverse of the process order, in order to restore the original characteristics of the image provided by a video camera as taught by Kobayashi (see column 6, lines 10-15), thus providing a high quality reproduction.

8. Claims 4-8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu, US 2001/0010520, in view of Kobayashi et al, US 5,390,028, as stated in claim 2, and further in view of Sasaki et al., US 6,515,698.

In regard to claims 4-6, Muramatsu, US 2001/0010520, in view of Kobayashi et al., US 5,390,028, discloses the image signal process order device of claims 2 and 3, respectively. The Muramatsu and Kobayashi references do not disclose wherein data indicating the process order is recorded in an information recording area of the recording

medium, and the image signal is recorded in an image recording area of the recording medium.

Sasaki et al., US 6,515,698, discloses an image processing system wherein data indicating the process order is recorded in an information recording area of the recording medium (see figure 14, element 209, header section), and the image signal is recorded in an image recording area of the recording medium (see figure 14, element 209).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Muramatsu, US 2001/0010520, in view of Kobayashi et al, US 5,390,028, and further in view of Sasaki et al., US 6,515,698, to have a recording medium wherein data indicating the process order is recorded in an information recording area of the recording medium, and the image signal is recorded in an image recording area of the recording medium, in order for the other devices the storage medium is used in to easier access the header to see previous processing and determine what further processing is required to obtain the desired image.

In regard to claim 7, Muramatsu, US 2001/0010520, in view of Kobayashi et al., US 5,390,028, discloses the image signal process order device of claim 2. The Muramatsu and Kobayashi references do not specifically disclose a program to process the corrected image signal, the program comprising: a processing order data reading section executable to read processing order data from first area of a storage; and an image data reading section executable to read image data from a second area of the storage.

Sasaki et al, US 6,515,698, discloses a program (see figure 17 and column 8, lines 49-51) to process the corrected image signal, the program comprising:

a processing order data reading section executable to read processing order data from first area of a storage (see column 8, lines 53-55); and

an image data reading section executable to read image data from a second area of the storage (see column 8, lines 56-62: the image data is read out of the memory to decode it).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Muramatsu, US 2001/0010520, in view of Kobayashi et al, US 5,390,028, and further in view of Sasaki et al., US 6,515,698, to have a program to process the corrected image signal, the program comprising: a processing order data reading section executable to read processing order data from first area of a storage; and an image data reading section executable to read image data from a second area of the storage, in order to quickly locate the corresponding data for each section.

In regard to claim 8, Muramatsu, US 2001/0010520, in view of Kobayashi et al., US 5,390,028, and further in view of Sasaki et al., US 6,515,698, discloses the image signal process order device of claim 7. The Sasaki reference discloses the program further comprising:

a compressed data determining section executable to determine whether the image data stored in the second storage area is compressed image data (see column 8, lines 56-62); and

an expansion section executable to expand the image data read from the second storage area when the compressed data determining section determines

that the image data stored in the second storage area is compressed image data (see column 8, lines 56-62).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Muramatsu, US 2001/0010520, in view of Kobayashi et al, US 5,390,028, and further in view of Sasaki et al., US 6,515,698, to have the program further comprising: a compressed data determining section executable to determine whether the image data stored in the second storage area is compressed image data; and an expansion section executable to expand the image data read from the second storage area when the compressed data determining section determines that the image data stored in the second storage area is compressed image data, in order to properly expand image data so the processing can be performed.

In regard to claim 11, Muramatsu, US 2001/0010520, in view of Kobayashi et al, US 5,390,028, and further in view of Sasaki et al., US 6,515,698, discloses the image signal process order device of claim 7. The Muramatsu reference discloses a determining section that determines whether all the processing, including restoration processing performed in the combination of Muramatsu, Kobayashi and Sasaki, has been completed (see para 54).

Allowable Subject Matter


9. Claims 9, 10, 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on 571-272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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